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Substitute for form 1449A/PTO	Cor	mplete if Known	OIPE
	<b>Application Number</b>	10/603,860	/
INFORMATION DISCLOSUR	E Filing Date	June 26, 2003	JAN 1 8 2005
STATEMENT BY APPLICAN	T First Named Inventor	HASSON, Jaime	
	Group Art Unit	2881	To Transius Met
(use as many sheets as necessary)	Examiner Name	Not yet known	

Attorney Docket Number

			U.	S. PATENT DOCUMENTS		
Examiner nitials*	Cite, No.	U.S. Pater Number	Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
KK	A	5,012,200		Meinzer	04-30-1991	
RK.	В	5,862,460		Rich	01-19-1999	
KK	С	5,903,854		Abe et al.	05-11-1999	·
<u> KK</u>	D	6,330,455		Ichihara	12-11-2001	
KK	E	5,302,914		Armtz et al.	04-12-1994	
	F	6,285,251		Dent et al.	09-04-2001	
KK	G	5,694,093		DaSliva et al.	12-02-1997	
KK.	н	5,854,571		Pinckley et al.	12-29-1998	
KK	<u> </u>	5,872,481		Sevic et al.	02-16-1999	
- KK	J	0,133,768		Dent	10-17-2000	
	K	6,201,452		Dent et al.	03-13-2001	
KK.	L	5,345,189		Hornak et al.	09-08-1994	
KK	м	5,264,807		Okubo et al.	11-23-1993	
KK	N	5,909,643		Alhara	08-01-1999	
KK	0	5,929,702		Myers et al.	09-27-1999	
KK	P	5,768,269		Wu	05-26-1998	
KK_	Q	5,786,727		Sigmon	07-28-1998	
KK	R	5,886,575		Long	03-23-1999	
TT	S	5,880,633		Leizerovich et al.	03-09-1999	
ŔŔ	T	5,739,723		Sigmon et al.	04-14-1998	<del></del>

				FORE	IGN PATENT DOCUME	ENTS		
Examiner initials*	Cite, No.	Office <sup>3</sup>	gnPatent Doc Number Kin	d Code <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	το
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Examiner Date /Kevin Kim/ (10/27/2006) Signature Considered

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	Substitute	for fom	1449A/PTO	Com	plete if Known
				Application Number	10/603,860
INF	ORMA <sup>*</sup>	<b>LION</b>	DISCLOSURE	Filing Date	June 26, 2003
STA	ATEME	NT B	Y APPLICANT	First Named Inventor	HASSON, Jaime
			•	Group Art Unit	2881
(1	use as ma	ny she	ets as necessary)	Examiner Name	Not yet known
Sheet	2	of	4	Attorney Docket Number	P-5321-US

		U.	S. PATENT DOCUMENTS		
Examiner initials*	Cite No. 1	U.S. Patent Document  Number Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	v	5,872,481	Sevic et al.	02-16-1999	
	w	5,661,434	Brozovich et al.	08-26-1997	
	x	5,420,541	Upton et al.	05-30-1995	
	Y	5,568,094	Bowen et al.	10-22-1996	
	z	5,548,248	Tamamoto et al.	08-20-1996	
	AA	5,541,554	Stengel et al.	07-30-1996	
	AB	5,724,005	Chen et al.	03-03-1998	
	AC	4,439,744	Kumar et al.	03-27-1984	
	AD	5,621,351	Purl et al.	04-15-1997	
	AE	4,433,312	Kahn	02-21-1984	
	AF	5,974,041	Kornfeld et al.	10-28-1999	
	AG	3,777,275	Cox	12-04-1973	
	АН	6,587,511	Barak et al.	07-01-2003	
	AJ	5,901,346	Stengel et al	05-04-1999	-
	AJ	2003/0125085	Hasson et al.	07-03-2003	
	AK	6,825,719	Barak et al.	11-30-2004	
	AL	10/131,750	Barak et al.	04-24-2002 (filing date)	
	AM	5,786,728	Alinikula	07-28-1998	
	AN	6,633,199	Nielsen et al.	10-14-2003	
	AO	6,147,653	Wallace et al.	11-14-2000	
	AP	5,295,162	Zarembowitch	03-15-1994	
	AQ	6,271,782	Steensgaard-Madsen	08-07-2001	
	AR	6,008,703	Perrott et al.	12-28-1999	
	AS	2003/208056	Hietala	11-06-2003	

		Forei	ionPatent	Document	IGN PATENT DOCUME	Υ	T	$\overline{}$
xaminer nitials*	Cite, No.		Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	-
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	Substitu	te for fo	orm 1449B/PTO	Com	plete if Known
				Application Number	10/603,860
INFO	RMA	TION	N DISCLOSURE	Filing Date	June 26, 2003
STA	TEME	NT I	BY APPLICANT	First Named Inventor	HASSON, Jaime
				Group Art Unit	2881
(U	se as m	any sh	eets as necessary)	Examiner Name	Not yet known
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	NON PATENT LITERATURE DOCUMENTS			
Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		
ΑT	FREDRICK H. RAAB, "Efficiency of Outphasing RF Power-Amplifier Systems", IEEE Transactions on			
<del></del>	Communications. Vol. Com-33, No. 10, Oct 1985, pp. 1094-1099			
AU	STEVE C. CRIPPS, "RF Power Amplifiers for Wireless Communications", 1999, USA, pp. 219-250			
AV	D.C. Cox, "Linear Amplification with Nonlinear Components", IEEE Transaction on Communications, December			
	1974, pp.1942-1945.			
AW	Bob Stengel and William R. Elsenstadt, "LINC Power Amplifier Combiner Method Efficiency Optimization", IEEE			
	Transaction on Vehicular Technology. Vol.49, No. 1, January 2000, pp.229-234			
AY	S.A. HETZEL et al., "A LINC Transmitter", University of Bristol, IEEE, 1999, pp. 133-137			
AZ	S. O. Ampem-Darko, H.S. Al-Raweshidy, "A Novel Technique for Gain/Phase Error Cancellation in LINC			
	Transmitters*, 1999 IEEE , pp. 2034-2038			
ВА	J. Nieznanski, "Performance characterization of vector sigma-delta modulation", IECON '98, Proceedings of the 24th Annual Conference of the IEEE, vol. 1, pp. 531-536, 1998			
	ID.1	publisher, city and/or country where published.  FREDRICK H. RAAB, "Efficiency of Outphasing RF Power-Amplifier Systems", IEEE Transactions on  Communications. Vol. Com-33, No. 10, Oct 1985, pp. 1094-1099  U STEVE C. CRIPPS, "RF Power Amplifiers for Wireless Communications", 1999, USA, pp. 219-250  V D.C. Cox, "Linear Amplification with Nonlinear Components", IEEE Transaction on Communications, December 1974, pp. 1942-1945.  W Bob Stengel and William R. Elsenstadt, "LINC Power Amplifier Combiner Method Efficiency Optimization", IEEE Transaction on Vehicular Technology. Vol.49, No. 1, January 2000, pp.229-234  Y S.A. HETZEL et al., "A LINC Transmitter", University of Bristol, IEEE, 1999, pp. 133-137  Z S. O. Ampem-Darko, H.S. Al-Raweshidy, "A Novel Technique for Gain/Phase Error Cancellation in LINC Transmitters", 1999 IEEE, pp. 2034-2038		

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	вв	D.L. Neuhoff, "Polar quantization revisited", IEEE International Symposium on Information Theory, 1997 Proceedings, pp. 60, 1997	
-	вс	N.O. Sokal, "RF Power Amplifiers, Classes A through S – How they operate, and when to use each", Electronics Industries Forum of New England, Professional Program Proceedings, pp. 179-183, 1997	
	8D	T. Yamaji, A. Yasuda, H. Tanimoto, Y. Suzuki, "A Digital-to-RF Converter Architecture Suitable for a Digital-to-RF Direct-Conversion Software Defined Radio Transmitter", IEICE Trans. Commun., vol. E83-B, No. 6, pp. 1254-1260, June 2000.	
	BE	MICHAEL H. PERROTT ET AL., "A Modeling Approach for Σ-Δ Fractional-N Frequency Synthesizers Allowing Straightforward Noise Analysis", IEEE Journal of Solid-State Circuits, Vol. 37, No. 8, August 2002, pp. 1028-1038	
	BF	M.H. Perrott, "Techniques for High Data Rate modulation and Low Power Operation of Fractional-N Frequency Synthesizers", PH.D Disseration, MIT, September 1997, Retrieved from the Internet, URL:http://www-mtl.mit.edu/{perrott/pages/thesis.pdf/, pp. 1-90	
ZHANG et al., "Multibit Oversampled Sigma - Delta A/D Convertor with Nonuniform Quantisation", ELECTRONICS LETTERS, 14 MARCH 1991, UK, Vol. 27, No. 6, pp. 528-529			

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